

REMARKS UNDER 37 C.F.R. 1.111

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version with markings to show changes made".

Kindly consider all claims.

The invention is unitary. All claims should be examined in Class 607, subclass 50, which is indented under subclass 2 and subclass 1 (see Exhibit A).

Claims 1-41 require considering references in subclass 50 "healing". All claims require "healing". There is no serious burden on the examiner to examine all claims.

The invention as described in the claims are neither independent nor distinct. In fact, the invention as claimed arise from the same inventive effort. Where inventions are neither independent nor distinct, restrictions should not be required. Where inventions arise from the same inventive effort, restriction should not be required.

MPEP 802.01 points out that a sub-combination and a combination are not independent inventions, and that a process and an apparatus used in the practice of the process are not independent inventions. That same section points out that independent means that there is no disclosed relationship between the subjects disclosed.

The examiner has not made any requirement based on the subject matter being independent. Therefore it is understood

that the examiner concedes that the subject matter is not independent.

The examiner's requirement for restriction is based upon his holding that the subjects are distinct. That is, as pointed out in Section 802.01, the examiner has held that the subject matter as claimed:

are capable of separate manufacture, use or sale as claimed,
AND ARE PATENTABLE (novel and unobvious) OVER EACH OTHER.

The examiner has held under Section 803 that the claimed inventions:

are able to support separate patents and they are ...
distinct (MPEP Section 806.05-806.05(i)).

However, Section 803 unequivocally states:

If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to distinct or independent inventions.

So that Section 803 makes its point clearly, the serious burden requirement is repeated under the title:

CRITERIA FOR RESTRICTION BETWEEN
PATENTABLY DISTINCT INVENTIONS

Section 803 goes on to state that there are two criteria for a restriction requirement: one, that the inventions must be distinct as claimed; and two, that there must be a serious burden on the examiner if restriction were not required.

Section 803 goes on to state under GUIDELINES an that examiner must provide reasons and/or examples to support conclusions. The examiner has never stated that there would be a serious burden on the examiner if restriction were not required.

Indeed, there should be no serious burden on the examiner. The examiner in this case is a senior examiner and is well skilled in examining Class 607 and in Subclass 1, and Subclass 2 and Subclass 50, which is indented under Subclass 2, which in turn is indented under the main Subclass 1.

No claim is drawn outside of subclass 50, and therefore it is believed that no difficult search is required in Subclass 50.

The subclasses the examiner has cited are all close together and are all within the subclasses which the examiner regularly searches, and all require searching and indeed are indented under each other in the classic outline form. Indeed, it would not be unreasonable for the examiner to search three subclasses that were close together and indented. Therefore restriction should not be required.

The applicant notes that the examiner has noted that Group VI claims should be examined in Subclass 50 of Class 607, but that subclass is indented under Subclass 2.

To the extent that 50 is an appropriate classification for the claims, it is also an appropriate classification for the remainder of the claims, since all of the claims describe healing and 50 is the only subclass in Class 607 that specifically indicates healing.

With regard to the examiner's specific points, in the following paragraphs it can be seen that restriction is not proper.

2. Groups I and II inventions are not distinct. Claim 42, for example, is substantially similar to Claim 9. Both groups result from the single inventive effort. Claim 42, for example, sets forth the specifics of the sub-combination of the healing apparatus as defined in claims 1-41. The combination as claimed in claim 42 sets forth the details of the sub-combination. The two-way distinctiveness required by 806.05(c) cannot be established. The combination as claimed in claim 42 requires the sub-combination as claimed. There is no separate classification, status or field of search as required by 806.05(c), because subclass 50, which is noted by the examiner for Group II and IV is simply an indented subclass of Class 607, which is noted by the examiner for Groups. Both subclasses would have to be examined in both cases.
3. Inventions II, III, IV and V are related because they all require the structure of Group I claims, and they all use the process of Group VI claims.
The inventions of Groups II, III, IV and V are not different combinations in that they do not have "different modes of operation" as required by 806.04. Moreover, where inventions are related as disclosed but are not distinct as claimed, restriction is never proper (MPEP 806). The inventions are not distinct as claimed because each invention requires the healing apparatus as claimed. Moreover, there is no serious burden on the examiner because

Subclasses 50 and 2 are both indented subclasses under Subclass 1, and both inventions II and IV are classified together in the same single subclass, 50, and all of the inventions as claimed should be checked in Subclass 50, healing.

4. MPEP 806 provides that if the inventions are not distinct as claimed, restriction is never proper.

The process as claimed in Group VI claims is not distinct from the products as claimed in the Groups I, II and III claims. For example, the process as claimed in claim 58 (Group VI) is not distinct from the apparatus as claimed in claim 1 or the apparatus as claimed in claim 42 (Group II), the apparatus as claimed in Group III. The examiner has not given examples and does not take into account the claims. Moreover, Section 806.05(h) emphasizes "as claimed" and falls under the cautions of 806 and 806.05, both of which state, "where the inventions are related as disclosed but are not distinct as claimed, restriction is never proper". In the present case the particular criteria and guidelines of 803 must be followed in that there must be a serious burden on the examiner if restriction were not required. In the present case, all of the groups must be searched in all of the subclasses which the examiner has pointed out. All are properly classified and searched together, and the search for one group would not be complete without searching all of the subclasses that the examiner has pointed out.

Patent and Trademark Office records indicate that the number of patents in the classes noted by the examiner is not excessive and would not suggest a hardship. For example, the numbers of patents in those subclasses total 438. Many are duplicates. Both of those classes should be searched in any case. In Subclass 2 under which 50 is indented only 283 patents are indicated, and in the general subclass 1 only 95 patents are indicated. In Subclass 50 only 77 patents are listed. The sole exception to small numbers of patents within the indicated subclasses is found in Subclass 2 where 283 patents have appeared. It is believed that the experienced examiner in this application is familiar with all of these subclasses. Moreover, from the title of the listed subclasses it appears that the most important subclass is 50, in which only 77 patents have issued. There should be no hardship on the examiner to complete examination for all groups.

Reconsideration and allowance of the application are requested. Reconsideration and withdrawal of the restriction requirement are requested.

All §112 objections have been overcome by amendments, none of which is related to patentability or changes the scope of the claimed invention.

Reconsideration of claims 11, 27 and 39 from a §112 standpoint is requested. The meaning of the elements appears clear.

New claims 84-101 further point out new and unobvious features of the invention.

Claim 84 adds to claim 1 and points out that the cells concurrently or sequentially generate radio frequencies, electromagnetic radiations, magnetic fields and current-voltage signals and combinations thereof, not found in the references.

Claim 87 points out the flexible base, the plural individually controlled energy applicator cells, and the controls for controlling the energy applied to the wounded tissues. None of those features is found in the references.

Claim 88 adds to claim 87 plural energy generators, and claim 89 adds the controlled field intensities, not found in the references.

Claim 90 points out the independent control of strength of field in each applicator cell.

Claim 91 points out the independent control of frequency in each applicator cell.

Claim 92 points out the independent control of strength of field and frequency in each applicator cell.

Claim 93 points out the independent control of pulse width in each applicator cell.

Claim 94 points out the independent control of pulse shape in each applicator cell.

Claim 95 points out the independent control of pulse width and shape in each applicator cell.

Claim 96 points out the independent control of frequency modulation in each applicator cell.

Claim 97 points out the independent control of amplitude modulation in each applicator cell.

Claim 98 points out the independent control of amplitude and frequency modulation in each applicator cell.

Claim 99 points out the independent control of direct application of current in each applicator cell.

Claim 100 points out the independent control of direct application of voltage in each applicator cell.

Claim 101 points out the independent control of direct application of current and voltage in each applicator cell.

Claim 102 points out the carrier, the cells, the power source and the controls. Claims 103, 104 and 105 respectively add the several arrays, the several connections and the remote control.

None of those features are found in the prior art Browner, Russek, Ostrow, Alon or McLean references.

Browner would not have anticipated claim 1-7.

Claim 1 and its dependent claims point out a base on a body and cells on the base. Moreover, Browner is not a healing apparatus as claimed herein. Browner does not show controls connected to the cells separately controlling application of power to each of the cells individually (see Figures 7, 8 and 9).

Russek and Alon would not have made any claim obvious. Russek has electrodes touching the body on a belt for muscle

tensioning. Alon has a group of cells contacting a body for muscular control. Neither has a base on the body and a plurality of cells on a single base. Neither reference is a healing apparatus. Neither has remote controls (claim 16). Neither has orthogonal arrangement of cells on a body-contacting base (claim 26). Neither has a base encircling a limb (claim 39).

Ostrow and Alon would not have made the invention obvious. Ostrow uses electromagnets in stimulator pads for neuro muscular stimulation. Neither Ostrow nor Alon suggests healing. Neither suggests a body-contacting base with plural cells.

The combination of Ostrow, Alon and Russek would not have made the invention as claimed obvious.

Ostrow uses electromagnets in pads for neuro muscular stimulation. Alon has separate pads for electro neuro muscular stimulation. Russek has electrodes touching the body and plugs in electrodes.

None of those references suggests a power source mounted on or connected to a base as claimed.

Ostrow, Along and Russek would not have made obvious the subject matter of claims 16-25.

Ostrow uses electromagnets in pads for neuro muscular stimulation. Alon has separate pads for electro neuro muscular stimulation. Russek has electrodes touching the body and plugs in electrodes.

None of the references has remote controls (claim 16). None has a field generator and interference-preventing shielding

(claim 17). None has an off-on switch connected to the cables of claim 17. None of the prior art cables are signal-carrying cables. None of the references shows or suggests the particular structure of the independent claim and the dependent claims.

Claims 40 and 41 distinguish the invention from Ostrow, Alon and McLeod.

Ostrow uses electromagnets in pads for neuro muscular stimulation.

Alon has separate pads for electro neuro muscular stimulation.

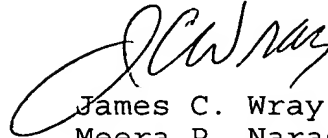
McLeod describes two coils which can be bent to conform to the anatomical contour of a human. McLeod does not have a base for placing on a body and plural cells arranged on the base, and does not have plural sensors incorporated into the base as described in claim 40. McLeod does not have sensors which sense parameters indicative of the wounds to be treated as described in claim 41.

McLeod simply has a magnetometer 146 which senses his own magnetic field.

Each of the claims points out features of the invention which are not anticipated by any reference and which would not have been obvious from any reference or any reasonable combination of reference.

Reconsideration and allowance of all claims are respectfully requested.

Respectfully,

A handwritten signature in black ink, appearing to read 'JC Wray', is written over the typed name.

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November 14, 2002

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claims 84-105 have been added above.

Claims 7, 8, 12, 15, 16, 20, 24, 28, 29, 31-39 and 42 have been amended as below:

7. (Amended) The apparatus of claim 1, wherein the controls further [comprising] comprise self-contained controls in each cell.

8. (Amended) The apparatus of claim [1] 7, further comprising batteries connected to the self-contained controls.

12. (Amended) The apparatus of claim 9, wherein the cables are signal carrying cables.

15. (Amended) The apparatus of claim 9, wherein the battery, the control circuits, the shielding, the coil and the cables are surrounded by a housing.

16. (Amended) The apparatus of claim 1, further comprising remote controls connected to the controls for controlling the cells remotely.

20. (Amended) The apparatus of claim 17, wherein the cables are signal carrying cables.

24. (Amended) The apparatus of claim 22, wherein the cables are signal carrying cables.

28. (Amended) The apparatus of claim 27, wherein the control conduits are connected to a power and signal generator and a generator control.

29. (Amended) The apparatus of claim 27, wherein the power and signal generator and generator control are portable.

31. (Amended) The apparatus of claim 27, wherein the control conduits are signal carrying control conduits.

32. (Amended) The apparatus of claim 1, further comprising a control panel connected to the controls and mounted on one end of the base.

33. (Amended) The apparatus of claim 1, further comprising control panels connected to the controls and mounted on opposite ends of the base.

34. (Amended) The apparatus of claim 1, the power supply further comprising a battery power supply mounted on one end of the base.

35. (Amended) The apparatus of claim 1, the power supply further comprising battery power supplies mounted on opposite ends of the base.

36. (Amended) The apparatus of claim 1, the power supply further comprising a signal generator and control mounted on one end of the base.

37. (Amended) The apparatus of claim [1] 36, wherein [a] the signal generator and control [is] are mounted transverse from another signal generator and control on an opposite end of the base.

38. (Amended) The apparatus of claim [2] 3, wherein [the] frequency and field strength of the energies are variable with

increasing frequencies [for indicating] in proximity to the wounds to be treated.

39. (Amended) The apparatus of claim 1, wherein the base encircles a limb on the body.

42. (Amended) A healing cell apparatus comprising cells having self-contained controls, wherein the self-contained controls comprise control circuits connected to [the] batteries, cables connected to the control circuits, a field generator coil for producing energy connected to the cables, a shielding separating the control circuits from the coil for shielding the control circuits and any adjacent cells from interference, and a coil enclosure and patient insulation interposed between a patient and the coil.

[CLAIMS]

1. A healing cell apparatus comprising a base for placing on a body, a plurality of cells arranged on the base, a power supply individually communicating independently with each of the cells and controls connected to the cells separately controlling application of power to each of the cells individually.

2. The apparatus of claim 1, wherein the base is thin, flexible and portable.

3. The apparatus of claim 1, wherein the cells generate energy selected from the group of energies consisting of radio frequencies, electro-magnetic radiations, magnetic fields, current-voltage signals, and combinations thereof.

4. The apparatus of claim 1, wherein the power supply is a power source selected from the group consisting of batteries, power outlet, converter and oscillator, transformer, and combinations thereof.

5. The apparatus of claim 4, wherein the power source is mounted on the base.

6. The apparatus of claim 4, wherein the power source is connected to the base.

7. The apparatus of claim 1, further comprising self-contained controls in each cell.

8. The apparatus of claim 1, further comprising batteries connected to the self-contained controls.

9. The apparatus of claim 8, wherein the self-contained controls comprise control circuits connected to the batteries,

cables connected to the control circuits, a field generator coil for generating energy connected to cables, a shielding separating the control circuits from the coil for shielding the control and any adjacent cells from interference, and a coil enclosure and patient insulation interposed between a patient and the coil.

10. The apparatus of claim 9, wherein the control circuits are power control circuits.

11. The apparatus of claim 9, wherein the control circuits are signal control circuits.

12. The apparatus of claim 9, wherein the cables are signal cables.

13. The apparatus of claim 9, wherein the cables are power cables.

14. The apparatus of claim 9, wherein the energy is selected from a group of energies consisting of electro-magnetic radiations, radio frequencies, magnetic fields, and combinations thereof.

15. The apparatus of claim 9, wherein the battery, the control, the shielding, the coil and the cables are surrounded by a housing.

16. The apparatus of claim 1, further comprising remote controls for controlling the cells remotely.

17. The apparatus of claim 16, wherein each cell further comprises cables, a field generator coil for generating energy, patient insulation interposed between a patient and the coil, a coil enclosure, and shielding for preventing interference.

18. The apparatus of claim 17, further comprising an on/off switch connected to the cables.

19. The apparatus of claim 17, wherein the cables are power cables.

20. The apparatus of claim 17, wherein the cables are signal cables.

21. The apparatus of claim 17, wherein the energy is selected from a group of energies consisting of electro-magnetic radiations, radio frequencies, magnetic fields, and combinations thereof.

22. The apparatus of claim 16, wherein each cell further comprises cables connected to electrodes for producing current-voltage signals, patient insulation and a cable enclosure.

23. The apparatus of claim 22, wherein the cables are power cables.

24. The apparatus of claim 22, wherein the cables are signal cables.

25. The apparatus of claim 22, further comprising an on/off switch connected to the cables.

26. The apparatus of claim 1, wherein the cells have an orthogonal arrangement on the base.

27. The apparatus of claim 1, further comprising control conduits mounted on the base.

28. The apparatus of claim 27, wherein the control conduits are connected to a power and signal generator and control.

29. The apparatus of claim 27, wherein the power and signal generator and control are portable.

30. The apparatus of claim 27, wherein the control conduits are power control conduits.

29. The apparatus of claim 27, wherein the power and signal generator and control are portable.

31. The apparatus of claim 27, wherein the control conduits are signal control conduits.

32. The apparatus of claim 1, further comprising a control panel mounted on one end of the base.

33. The apparatus of claim 1, further comprising control panels mounted on opposite ends of the base.

34. The apparatus of claim 1, further comprising a battery power supply mounted on one end of the base.

35. The apparatus of claim 1, further comprising battery power supplies mounted on opposite ends of the base.

36. The apparatus of claim 1, further comprising a signal generator and control mounted on one end of the base.

37. The apparatus of claim 1, wherein a signal generator and control is mounted transverse from another signal generator and control on an opposite end of the base.

38. The apparatus of claim 2 wherein the frequency and field strength of the energies are variable with increasing frequencies for indicating proximity to the wounds to be treated.

39. The apparatus of claim 1, wherein the base encircles a limb on the body.

40. The apparatus of claim 1, further comprising sensors incorporated into the base.

41. The apparatus of claim 40, wherein the sensors measure different parameters indicative of the wounds to be treated.

42. A healing cell apparatus comprising cells having self-contained controls, wherein the self-contained controls comprise control circuits connected to the batteries, cables connected to the control circuits, a field generator coil for producing energy connected to the cables, a shielding separating the control circuits from the coil for shielding the control and any adjacent cells from interference, and a coil enclosure and patient insulation interposed between a patient and the coil.

43. The apparatus of claim 42, wherein the control circuits are power control circuits.

44. The apparatus of claim 42, wherein the control circuits are signal control circuits.

45. The apparatus of claim 42, wherein the cables are power cables.

46. The apparatus of claim 42, wherein the cables are signal cables.

47. The apparatus of claim 42, wherein the energy is selected from a group consisting of electro-magnetic radiations, radio frequencies, magnetic fields, and combinations thereof.

48. The apparatus of claim 42, further comprising a housing for surrounding the battery, the control, the shielding, the coil and the cables.

49. The apparatus of claim 19, further comprising external connectors on each cell for connecting the cells to external signal and power controls.

50. A healing cell apparatus for producing current-voltage signals comprising cells mounted on a base, wherein each cell comprises a battery and a self-contained control connected to the battery.

51. The apparatus of claim 50, wherein the self-contained control comprises control circuits, cables connected to the control circuits and to the battery, electrodes connected to the cables, and patient insulation for mounting the electrodes.

52. The apparatus of claim 51, wherein the control circuits are power control circuits.

53. The apparatus of claim 51, wherein the control circuits are signal control circuits.

54. The apparatus of claim 51, wherein the cables are power cables.

55. The apparatus of claim 51, wherein the cables are signal cables.

56. The apparatus of claim 51, further comprising a housing for the battery, the control circuits, and the cables.

57. The apparatus of claim 19, further comprising external connectors on each cell for connecting the cells to external signal and power controls.

58. A method for healing wounds comprising mounting a plurality of cells on a base, placing the base proximate a wound

on a body, applying energy from the cells to the wound and peripheral areas of the body by communicating power from a power source to the cells and controlling application of power to the cells individually for speeding the healing of soft tissues, bone fractures, cancerous tissues, nerve pathways and other body tissues being treated.

59. The method of claim 58, wherein applying the energy comprises selecting from a group consisting of radio frequencies, electro-magnetic radiations, magnetic fields, current-voltage signals, and combinations thereof.

60. The method of claim 58, wherein mounting the cells comprises mounting the cells on a thin, flexible and portable base.

61. The method of claim 58, wherein type, strength, pattern, frequency, pulse characteristics, width, repetition rate, and signal density of the energy is varied according to the type and size of the wound to be treated and proximity of the cells to the wound.

62. The method of claim 58, further comprising variably activating and controlling activation of each cell.

63. The method of claim 58, wherein placing the base on the wound comprises placing the cells facing a wound or encircling a limb.

64. The apparatus of claim 1, wherein the cells have varied shapes.

65. The apparatus of claim 1, wherein the cells have varied sizes.

66. The apparatus of claim 1, further comprising a battery power supply on the base, a power outlet connected to the base and connections between the battery power supply, the power outlet and the base.

67. The apparatus of claim 1, further comprising a battery power supply mounted on the base.

68. The apparatus of claim 67, wherein the battery power supply is mounted on a right side of the base.

69. The apparatus of claim 67, wherein the battery power supply is mounted on a left side of the base.

70. The apparatus of claim 67, wherein the battery power supply is mounted on a top side of the base.

71. The apparatus of claim 67, wherein the battery power supply is mounted on a bottom side of the base.

72. The apparatus of claim 67, wherein the battery power supply is mounted on a side of the base away from the body.

73. The apparatus of claim 42, wherein the cells have varied shape.

74. The apparatus of claim 42, wherein the cells have variable sizes.

75. The apparatus of claim 50, wherein the cells have varied shape.

76. The apparatus of claim 50, wherein the cells have variable sizes.

77. The method of claim 58, wherein placing the base on a body comprises placing the base proximate body.

78. The method of claim 77, wherein placing the base proximate the body comprises placing the base in contact with the body.

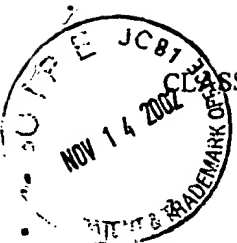
79. The method of claim 77, wherein placing the base proximate the body comprises placing the base spaced from the body.

80. The method of claim 77, wherein placing the base proximate the body comprises placing predetermined cells in contact with the body while placing other cells spaced from the body.

81. The apparatus of claim 50, wherein the control circuits are power and signal control circuits positioned within each cell for internally generating and controlling signals.

82. The apparatus of claim 50, wherein the control circuits are power and signal control circuits positioned outside the cells and a signal and control instrument connected to the circuits for externally generating and controlling signals.

83. The apparatus of claim 50, wherein the control circuits are power and control circuits selectively positioned inside or outside the cells, a combined signal and control module connected to the circuits for selectively controlling the cells.



LIGHT, THERMAL, AND ELECTRICAL APPLICATION

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3	..Electrical therapeutic systems	30	...Remotely changing, (e.g., programming, pacer) parameters or operation
4	..Combined with nonelectrical therapy	31	....Assurance of security, accuracy, or completion of programming procedure
5	..Combined cardioverting/defibrillating and pacing	32	...Communicating with pacer (e.g., telemetry)
6	..Cardioverting/defibrillating	33	...Energy source external of generator or body
7	...Sensing body condition or signal other than electrocardiographic signal	34	...Alterable energy source configuration
8	...Controlling or indicating stimulation level	35	...Biological substance or activity powered energy source
9	...Computing energy required or contact impedance	36	...Feature of stimulator housing or encapsulation
10	..Heart rate regulating (e.g., pacing)	37	...Feature of generator-applicator connection
11	...With nonimplanted generator	38	....Multiple position connector
12	...Regulating or compensating stimulus level	39	..Stimulating reproductive organ
13	...Stimulation raised above energy source level	40	..Stimulating bladder or gastrointestinal tract
14	...Reducing output recovery time	41	...Incontinence control
15	...Treating or preventing abnormally high heart rate	42	..Stimulating respiration function
16	....Selecting plural stimulation patterns	43	..Correcting spinal deformities
17	...Intermittent operation for energy conservation	44	..Hypertension treating
18	...Parameter control in response to sensed physiological load on heart	45	..Treating mental or emotional disorder
19	....Plural sensed conditions	46	..Electrical treatment of pain
20	....Physical activity	47	...Dental analgesia
21	....Respiratory movement	48	..Directly or indirectly stimulating motor muscles
22	....Body or blood temperature	49	...For walking assistance
23	....Chemical substance in blood	<u>50</u>	..Promoting tissue growth or healing
24	....Blood pressure	51	...Hard tissue (e.g., bone)
25	....Stroke volume	52	....With monitoring or testing feature
26	....Ventricular electrocardiographic intervals (e.g., Q-T interval)	53	..Promoting optical function
27	....Gradient or slope of electrocardiographic waves	54	..Producing visual effects by stimulation
28	...Testing or monitoring pacer function	55	..Promoting auditory function
29	....Measuring pacing, threshold, capture margin, or contact impedance	56	...Producing aural effects by stimulation
	....Testing condition of energy source	57	....By partially or wholly implanted device
		58	..Electrical stimulation for aversion and substance abuse therapy
		59	..Control signal storage (e.g., programming)

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GROUP 3600

December 2000

Exhibit A